



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,408	01/18/2005	Gilles Vibet	22193-00010-US1	2248
30678	7590	08/03/2006	EXAMINER	
CONNOLLY BOVE LODGE & HUTZ LLP SUITE 800 1990 M STREET NW WASHINGTON, DC 20036-3425			LIU, MICHAEL	
			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 08/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/521,408

Applicant(s)

VIBET ET AL.

Examiner

Michael Liu

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7 and 9 is/are rejected.
- 7) ☒ Claim(s) 4 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20050118.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. Figs 1A, 1B, 1C should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Title

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Machine for exposing printed circuit panels with gas balloons and mechanical spacers.

Specification

4. The disclosure is objected to because of the following informalities: On page 1, line 30, the reference numeral 22 should be changed to 20 in order to correspond to the drawings.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 5-7, 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Sangu (GB 2,281,980).

7. With respect to claim 1, Sangu discloses the following:

- a printed circuit panel exposure machine [see Fig 1];
- a first artwork support [2a] comprising a substantially rectangular frame and a transparent plate suitable for receiving said artwork, said plate being secured via its periphery to said frame;
- a second artwork support [2b] comprising a substantially rectangular frame and a transparent plate secured via its periphery to said frame and suitable for receiving said artwork, one of said supports being movable relative to the other, said panel being placed between said supports;
- means for providing sealing [3] between said frames of said supports when said frames are pressed one against the other;
- means for establishing suction [page 8, lines 14-15: vacuum] in the volume defined by said artwork supports and, said sealing means;

Art Unit: 2851

- at least one deformable leaktight balloon [4a, 4b] disposed between said transparent plates around at least a portion of said panel;
- a source of gas [air through 6a, 6b] under pressure at a pressure greater than the pressure of said suction;
- at least one pipe [6a, 6b] for causing said at least one balloon to communicate with said source of pressure thus serving, when suction is established in said volume, to cause the periphery of said transparent plates to press against said balloon.

8. With respect to claim 2, Sangu discloses the following:

- a plurality of leaktight deformable balloons [4a, 4b] surrounding said panel;
- each balloon being connected to said source of gas [air] under pressure by a pipe [7];
- said balloons occupying the major fraction of the space extending between the periphery of said panel and the frames.

9. With respect to claims 3, 7, Sangu discloses further comprising a plurality of mechanical spacers [3] interposed between said frames of said artwork supports.

10. With respect to claim 5, Sangu discloses wherein said at least one deformable leaktight balloon is of horizontal dimensions much greater than its thickness [see Fig 1].

11. With respect to claims 6, 9, Sangu discloses a plurality of sets of deformable leaktight balloons of dimensions adapted to the dimensions of panels to be exposed. In Fig 1, the balloons fit into the empty space and adjusts for different panel dimensions.

Allowable Subject Matter

12. Claims 4, 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter: Sangu alone or in combination with other references does not teach a printed circuit panel exposure machine comprising a plurality of mechanical spacers interposed between said frames of said artwork supports, wherein said spacers are adjustable in thickness.

Telephone Numbers

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Liu whose telephone number is (571) 272-9019. The examiner can normally be reached on Monday through Friday 9 am - 5 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on (571) 272-2399. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Art Unit: 2851

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

Michael Liu
Examiner
Art Unit 2851

ML 7/26/06

A handwritten signature in black ink, appearing to read 'Henry Hung Nguyen', with a long horizontal flourish extending to the right.

HENRY HUNG NGUYEN
PRIMARY EXAMINER